

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TORU MASAKI, SETUO KAWANO,
YUZO SAITOH and HIROZO IJIRI

Appeal No. 93-4274
Application 07/696,800¹

ON BRIEF

MAILED

APR 29 1996

PAT. & T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Before COHEN, LYDDANE and ABRAMS, Administrative Patent Judges.

LYDDANE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's refusal to allow claims 1 through 14, which are all of the claims pending in the application. The examiner has withdrawn the rejection of claims 3, 4, 10 and 14 subsequent to appeal and has indicated on page 2 of the answer that claims 3, 4, 10 and 14

¹ Application for patent filed May 7, 1991.

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stand objected to as containing allowable subject matter but depending from a rejected base claim. This leaves claims 1, 2, 5 through 9 and 11 through 13 for our consideration in this appeal.

The subject matter on appeal is directed to a gas distribution plate for use with a fluidized-bed reactor. Claim 1 is exemplary of the invention and reads as follows:

1. A gas distribution plate for use with a fluidized-bed gas-phase polymerizer reactor comprising: a flat plate and a plurality of cylindrical or frustoconical pieces each having an oblique hole or a spiral groove cut in a surface of each piece and each piece fitting into a respective hole in said flat plate.

The references of record relied upon by the examiner in rejections of the claims under 35 USC 102(b) and under 35 USC 103 are:

Helbig et al. (Helbig)	3,089,251	May 14, 1963
Kramer	3,672,577	Jun. 27, 1972
Korenberg	4,475,467	Oct. 9, 1984
Michimae et al. (Michimae)	4,759,884	Jul. 26, 1988

A new reference (made of record by appellants in Paper No. 4, dated March 9, 1992) relied upon by this panel of the Board in new rejections of the claims under 35 USC 102(b) and under 35 USC 103 is:

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Grunewald² 3,425,519 Jan. 16, 1986
(German Offenlegungsschrift)

Claims 1, 2, 5, 6 and 8 stand rejected under 35 USC 102(b) as being anticipated by Michimae.

Claims 1, 2 and 5 through 8 stand rejected under 35 USC 103 as being unpatentable over Helbig in view of Kramer.

Claims 1, 9 and 11 through 13 stand rejected under 35 USC 103 as being unpatentable over Isaksson in view of Kramer.

Claims 1, 2 and 5 through 8 stand rejected under 35 USC 103 as being unpatentable over Korenberg in view of Kramer.

Rather than reiterate the examiner's statement of the above rejections and the conflicting viewpoints advanced by the examiner and the appellants, we refer to pages 4 through 10 of the examiner's answer, to pages 6 through 16 of the appellants' brief and to the reply brief for the full exposition thereof.

OPINION

In arriving at our decision in this appeal, we have given careful consideration to appellants' specification and claims, to the applied prior art, and to the respective positions

² Our understanding of this reference results from our reading of a translation of this reference, prepared by the U.S. Patent and Trademark Office, a copy of which has been appended to this decision for the convenience of appellants.

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advanced by the appellants and by the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish either an anticipation of claims 1, 2, 5, 6 and 8 under 35 USC 102(b) or a prima facie case of obviousness with respect to any of the claims on appeal. Our reasoning for this determination follows.

We initially observe that an anticipation under 35 USC 102(b) is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention. See RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 221 USPQ 385 (Fed. Cir. 1984), cert. dismissed sub nom., Hazeltine Corp. v. RCA Corp., 468 U.S. 1228 (1984). Additionally, the law of anticipation does not require that the reference teach what the appellants are claiming, but only that the claims on appeal "read on" something disclosed in the reference, i.e., all limitations of the claim are found in the reference. See Kalman v. Kimberly Clark Corp., 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983) cert. denied, 465 U.S. 1026 (1984) (and overruled in part on another issue) 775 F.2d 1107, 227 USPQ 577 (Fed. Cir. 1985).

The rejection of claims 1, 2, 5, 6 and 8 under § 102(b) is based on the patent to Michimae, which discloses a gas distribution plate 10a (Figure 2) having a plurality of holes,

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each of which receive a cylindrical piece or pipe 15. The pipes 15 have holes 11a therethrough (note Figure 4), and the examiner has relied upon the disclosure in column 3, lines 12 through 15, that

the holes 11a or 11b are arranged in irregular directions. Various shaped holes can also be provided without specifying their straightness, and cross-section and end shapes

as support for the position stated on page 7 of the answer that

[a]ny features not disclosed in Fig. 2 are deemed inherent in view of the teaching in col. 3, lines 12-15.

We disagree. Appealed claim 1 requires "a plurality of cylindrical or frustoconical pieces each having an oblique hole or a spiral groove cut in a surface of each piece." While the pipes 15 with holes 11a certainly are cylindrical pieces, we find the disclosure in column 3, lines 12 through 15 of Michimae quoted above to be ambiguous at best. It is well settled that an anticipation rejection cannot be predicated on an ambiguous reference. See In re Turlay, 304 F.2d 893, 134 USPQ 355 (CCPA 1962). Furthermore, neither the specification nor the drawings of Michimae discloses the pipes as having either "an oblique hole or a spiral groove" as claimed, and an anticipation cannot be based on teachings in a reference that are vague or based on conjecture. See Datascope Corp. v. SMEC, Inc., 776 F.2d 320, 227 USPQ 838 (Fed. Cir. 1985). Thus, we cannot sustain the

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examiner's rejection of appealed claims 1, 2, 5, 6 and 8 under 35 USC 102(b).

Considering next the examiner's rejections under 35 USC 103, we note that in rejecting claims under § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993); In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). A prima facie case of obviousness is established by presenting evidence indicating that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. In re Lintner, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972).

Furthermore, the conclusion that the claimed subject matter is prima facie obvious must be supported by evidence, as shown by some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would have lead that individual to combine the relevant teachings of the references to arrive at the claimed invention. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), In re Lalu, 747 F.2d 703, 223 USPQ 1257 (Fed. Cir. 1984); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985) and ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 221 USPQ 929 (Fed. Cir. 1984).

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Additionally, rejections based on §103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner has the initial duty of supplying the factual basis for the rejection. The examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis. See In re Warner, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967). Our reviewing court has repeatedly cautioned against employing hindsight by using the appellants' disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings in the prior art. See, e.g., Grain Processing Corp. v. American Maize-Products Co., 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

As stated in W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-313 (Fed. Cir. 1983),

[t]o imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.

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While the patent to Kramer does teach replaceable frustoconical nozzle pieces having oblique holes, we find nothing in the teachings of any of the applied references to suggest that the nozzles of Kramer should be, or even could be, used to modify the grid plates of Helbig, Isaksson or Korenberg. It is our conclusion that the only reason to combine the teachings of Helbig and Kramer as applied in the rejection of claims 1, 2 and 5 through 8, of Isaksson and Kramer as applied in the rejection of claims 1, 9 and 11 through 13, and of Korenberg and Kramer as applied in the rejection of claims 1, 2 and 5 through 8 in the manner proposed by the examiner results from a review of the appellants' disclosure and the application of impermissible hindsight. Thus, we cannot sustain any of the examiner's rejections of appealed claims 1, 2, 5 through 9 and 11 through 13 under 35 USC 103.

We make the following new rejections pursuant to the provisions of 37 CFR 1.196(b).

Claims 1 and 9 are rejected under 35 USC 102(b) as being clearly anticipated by Grunewald. Note cylindrical pieces 19 with spiral grooves 20 cut in the surface thereof in Figure 6.

Claims 2, 5 through 8, 11 and 12 are rejected under 35 USC 103 as being unpatentable over Grunewald. With respect to claim 2, note that core 19 positioned within ring 10 (Figures 6-8 of Grunewald) forms a piece having at least one oblique hole

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therethrough. Whether such an oblique hole is formed as taught by Grunewald or is "bored" as claimed is, in our view, simply a matter of selecting from among known fabrication alternatives and well within the level of ordinary skill in the art. Moreover, we note that the limitation in appealed claim 2 that the oblique hole is "bored" is a process limitation in a product or article claim. We observe that product claims, such as the claims before us, may be properly drafted to include process steps to wholly or partially define the product. To the degree that process limitations distinguish the product over the product of the prior art, those limitations must be given the same consideration as traditional product limitations. See In re Hallman, 655 F.2d 212, 210 USPQ 609 (CCPA 1981). Nevertheless, the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim to the product is unpatentable even though the prior product was made by a different process. See In re Thorpe, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985); In re Marosi, 710 F.2d 799, 218 USPQ 289 (Fed. Cir. 1983). It is our opinion that the product recited in appealed claim 2 does not patentably distinguish over the cylindrical piece having an oblique hole as taught in Figures 6 through 8 of Grunewald.

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With respect to the limitations of appealed claims 5 through 8, 11 and 12, the disclosed purposes of the jet nozzle configurations of Grunewald, i.e., to "bring about the maximal possible distribution of the gas through the cross-section of the fluidized bed bottom" (lines 5 and 6 on page 2 of the translation), to bring about "satisfactory results from hydraulic or fluidic points of view" (lines 24-25 of page 2 of the translation) and to entail "a lot of adaptability options for different cases of application" (lines 25-26 of page 2 of the translation) would have suggested the orientations of the nozzles recited in these claims. We note that the law presumes skill on the part of the artisan rather than the converse. See In re Sovish, 769 F.2d 738, 226 USPQ 771 (Fed. Cir. 1985).

Accordingly, the decision of the examiner rejecting claims 1, 2, 5, 6 and 8 under 35 USC 102(b) and rejecting claims 1, 2, 5 through 9 and 11 through 13 under 35 USC 103 is reversed. New rejections of claims 1 and 9 under 35 USC 102(b) and of claims 2, 5 through 8, 11 and 12 under 35 USC 103 have been made pursuant to the provisions of 37 CFR 1.196(b).


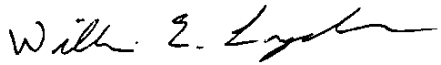

Any request for reconsideration or modification of this decision by the Board of Patent Appeals and Interferences based upon the same record must be filed within one month from the date of the decision (37 CFR § 1.197). Should appellants elect to have further prosecution before the examiner in response to the

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new rejection under 37 CFR § 1.196(b) by way of amendment or showing of facts, or both, not previously of record, a shortened statutory period for making such response is hereby set to expire two months from the date of this decision.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED, 37 CFR 1.196(b)


IRWIN CHARLES COHEN)
Administrative Patent Judge))

WILLIAM E. LYDDANE)
Administrative Patent Judge))

NEAL E. ABRAMS)
Administrative Patent Judge)

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